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STUDIES IN BORON CHEMISTRY(U) DUKE UNIV DURHAM NC PAUL
M GROSS CHEMICAL LAB B F SPIELVOGEL ET AL. 15 NOV 83
ARO-17650.5-CH DAAG29-79-D-1001

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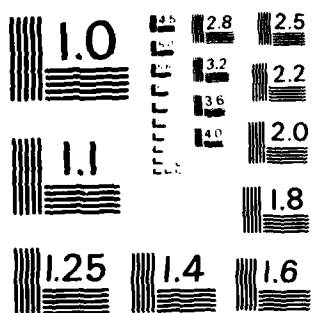
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|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|---------------------------------------------------------------------------------|
| 1. REPORT NUMBER 17650.5-CH | 2. GOVT ACQUISITION NO. | 3. RECIPIENT'S CATALOG NUMBER |
| 4. TITLE (and Subtitle) Studies in Boron Chemistry | | 5. TYPE OF REPORT & PERIOD COVERED Final: 1 July 1980 - 30 September 1983 |
| 7. AUTHOR(s) B. F. Spielvogel A. T. McPhail | | 6. PERFORMING ORG. REPORT NUMBER |
| 9. PERFORMING ORGANIZATION NAME AND ADDRESS Duke University Paul M. Gross Chemical Laboratory Durham, NC 27706 | | 8. CONTRACT OR GRANT NUMBER(s) DAAG29-79-D-1001 |
| 11. CONTROLLING OFFICE NAME AND ADDRESS U. S. Army Research Office P.O. Box 12211 Research Triangle Park, NC 27709 | | 10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS |
| 14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office) | | 12. REPORT DATE 15 November 1983 |
| | | 13. NUMBER OF PAGES 3 |
| | | 15. SECURITY CLASS. (of this report) Unclassified |
| | | 15a. DECLASSIFICATION/DOWNGRADING SCHEDULE |
| 16. DISTRIBUTION STATEMENT (of this Report) Approved for public release; distribution unlimited. | | |
| 17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report) NA | | |
| 18. SUPPLEMENTARY NOTES The view, opinions, and/or findings contained in this report are those of the author(s) and should not be construed as an official Department of the Army position, policy, or decision, unless so designated by other documentation. | | |
| 19. KEY WORDS (Continue on reverse side if necessary and identify by block number) | | |
| 20. ABSTRACT (Continue on reverse side if necessary and identify by block number) The exploration of the synthesis and characterization of isoelectronic and isostructural boron analogs of the α -amino acids, their precursors, and derivative was continued during this period. The boron analogs are very weak acids with pK_a approximately 8. They exhibit significant anti-arthritis, hypolipidemic, and antitumor activity. The chemistry and activity has been described in publications 1-9 and in patents and patent applications 1-5. | | |

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Statement of Problem and Results

The exploration of the synthesis and characterization of isoelectronic and isostructural boron analogs of the α -amino acids, their precursors, and derivative was continued during this period. The boron analogs are very weak acids with pK_1 approximately 8. They exhibit significant anti-arthritic, hypolipidemic, and anti-tumor activity. The chemistry and activity has been described in publications 1-9 and in patents and patent submissions 1-5.



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|---------------------------|------------|
| 1. Title of Report | |
| 2. Author(s) | |
| 3. Date | |
| 4. Project Number | |
| 5. Availability of Report | |
| 6. Price (incl. tax) | |
| 7. List | 8. Special |
| A-1 | |

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1. Iris H. Hall, C. O. Starnes, A. T. McPhail, P. Wisian-Neilson, M. K. Das, F. Harchelroad, Jr., and B. F. Spielvogel, "The Anti-inflammatory Activity of Amine-Cyanoboranes, Amine-Carboxyboranes, and Related Compounds," J. Pharm. Sci., 69, 1025 (1980)
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Patents Issued

1. Pharmacologically Active Amine-Boranes U. S. 4,312,989 (1982), Bernard F. Spielvogel, Andrew T. McPhail, Iris H. Hall
2. Pharmacologically Active Amine-Boranes, Method of Use, U. S. Patent 4,368,194 (1983), Bernard F. Spielvogel, Andrew T. McPhail, Iris H. Hall

Patents Pending

3. Pharmacologically Active Amine-Carboxyboranes, U. S. Patent Appl. SN 106,416, Bernard F. Spielvogel, Andrew T. McPhail, Iris H. Hall

4. Pharmacologically Active Amine-Carboxyboranes, European Patent Office SN 80810406.1, Bernard F. Spielvogel, Andrew T. McPhail, Iris H. Hall

5. Pharmacologically Active Amine-Carboxyboranes, Hanabusa Patent Office, Japan, Appl. SN GY-2024/A 12601, Bernard F. Spielvogel, Andrew T. McPhail, Iris H. Hall

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